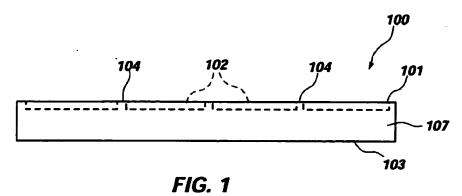
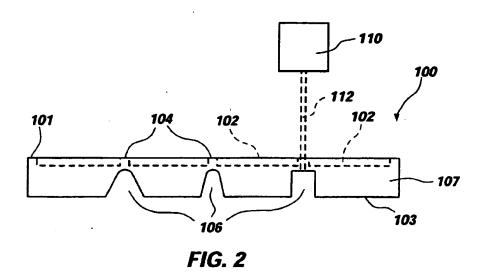
## ITILE: METHODS AND APPARATUS RELATING TO SINGULATING SEMICONDUCTOR WAFERS AND WAFER SCALE ASSEMBLIES

Inventor: Salman Akram .
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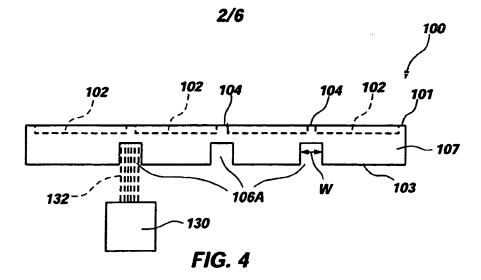
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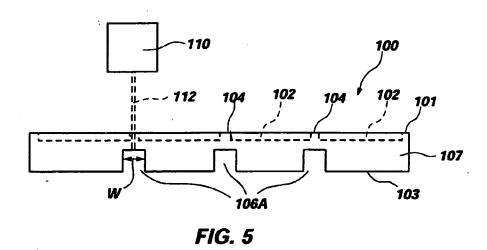
FIG. 3

#### SINGULATING SEMICONDUCTOR WAFERS AND WAFER SCALE

ASSEMBLIES Inventor: Salman Akram

Serial No.: Not Yet Assigned Docket No.: 2269-5527US





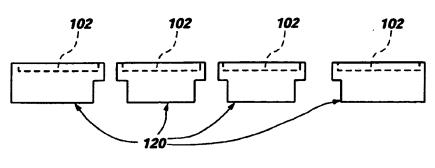


FIG. 6

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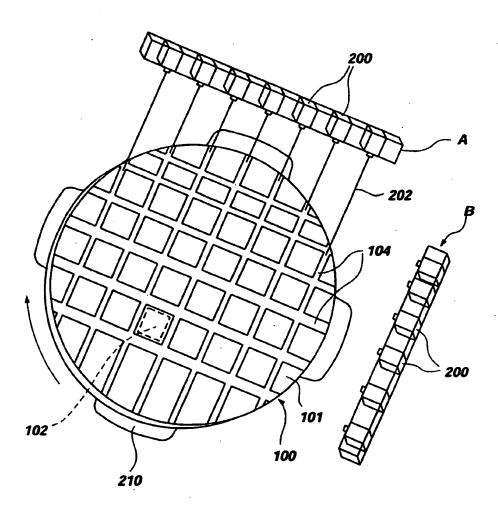


FIG. 7

### SINGULATING SEMICONDUCTOR WAFERS AND WAFER SCALE ASSEMBLIES

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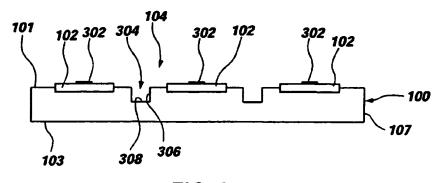


FIG. 8

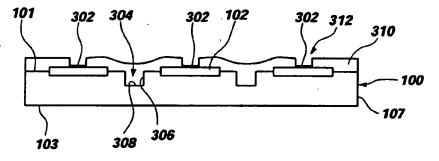


FIG. 9

# SINGULATING SEMICONDUCTOR WAFERS AND WAFER SCALE ASSEMBLIES

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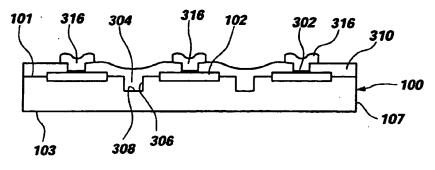


FIG. 10

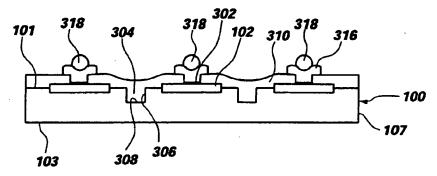


FIG. 11

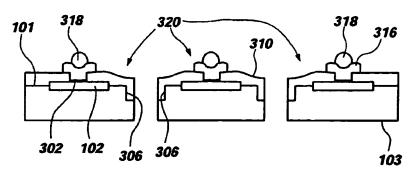


FIG. 12

#### TITLE: METHODS AND APPARATUS RELATING TO SINGULATING SEMICONDUCTOR WAFERS AND WAFER SCALE ASSEMBLIES

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434 450 432 450 442 FIG. 14C